These amendments are made without prejudice and are not to be construed as abandonment of the previously claimed subject matter or agreement with the Examiner's position. In accordance with the requirements of 37 C.F.R. § 1.121, a marked up version showing the changes to the claims, is attached herewith as Appendix A. For the Examiner's convenience, a complete claim set of the currently pending claims is also submitted herewith as Appendix B.

REMARKS

Status

Claims 1-3, 10-12, 15, 18-20 remain pending in the application. Claims 21 - 37 have been added.

The Invention

The present invention is directed to a power supply and related methods that are particularly suited to modern networking applications. A device according to the invention is designed for easy installation for controlling and power cycling network devices such as routers.

Applicant does not attempt to claim all remotely activated power devices, but instead the particular combinations provided in the claims that make the invention a long sought solution in providing power cycling for networking devices.

Response to Rejection

The claims, as amended, are not anticipated or rendered obvious by optionally controllable power supplies (such as discussed in the EMM reference) that teach a separate control cable and signal are needed to control the power supply. The claims, as amended, also are not anticipated or

rendered obvious by power supplies (such as shown in Lord) that teach that a telephone connection is needed to control the power supply, including in some cases the need for a modem to be continually powered on in order to detect codes or ringing on a telephone connection. The claims, as amended, also are not anticipated or rendered obvious by power supplies (such as shown in Pulizzi) that teach that data commands must enter the power supply and be processed by a microcontroller in order to control the operation of power outlets.

In fact, these references, teach away from the concept of the present invention that allows control of a network device not requiring any separate control connections or control cabling beyond the network cabling that is already present to connect the networking device and that do not require additional microcontrollers to be installed or programmed in order to provide operation of the power supplies.

Lord U.S. 5198806

The patent discuss a remote controller for a personal computer wherein an external modem 40, which is "supplied with operating power continuously" is enabled to receive, over a telephone line, a control signal and is then able to indicate to a controller 10 to power up a computer, after the modem has authorized an incoming user. A serial signal 60 passes from the modem through the controller 10 and to the personal computer over line 70. Control software is used to make the invention operate.

Singh U.S. 5347167

The patent discuss a remote controller for a personal computer wherein an external modem 23 receives and can send a signal to a power controller 2. Communication signals are never passed through the controller to reach the controlled computer system 11.

Ortiz U.S. 5359540

The patent discuss a remote controlling device wherein various outlets can be controlled by various means. One outlet may be controlled by detecting of a telephone ring signal that is derived from a pair of pass-through telephone jacks. Other serial signals are not pass-through signals.

Cheng I U.S. 5563455

The patent discuss a power sequencer that "senses the current through a first outlet ...and when the current through the first outlet exceeds a first threshold voltage,... provides power to a second outlet." This method of operation does not teach or suggest the present invention.

Cheng II U.S. 5644174

The patent also discuss a power sequencer, with further provisions for daisy chaining. CONTROL IN is described as a separately generated control signal that can also be used for daisy chaining. There is no illustration of a network signal or standard network port being used for controlling operation.

Pulizzi U.S. 5923103

The patent discuss a switched-output controller apparatus with repeater function that includes a microcontroller 18 that can communicate with remote control signals through various sockets e.g. 142, 144, 160, 162. As shown in the figure and discussed in the patent, all eight relays 60-74 are controlled by signals from the microcontroller 18 through a relay driver 24. The patent suggests that there is a command protocol for instructing microcontroller 18 in how to schedule switch operation of the outlets 40-54 through the relays. As shown in the figure and discussed in the patent, there is no direct operative connection between a signal line in any of sockets 142, 144, 160, 162 and the relays.

EMM 96

Applicant has reviewed the catalog pages provided by the Examiner. None of the indicated power supplies discuss in any detail the method of operation of the remote feature of the power supplies.

Applicant has therefore located additional information about these power supplies (see the attached letter to the Examiner). This additional information demonstrates that none of the cited power supplies use a standard network signal to control ON/OFF operation. These supplies, instead, require a separate signal to be run to the supplies from a computing device, especially for the purpose of remote operation. In some designs, this control signal, can be passed through the power supply to another power supply only to provide for a number of power supplies to be controlled by the same control signal.

The present invention, in contrast, does not requires a separate control signal or cable to be run to the power supply control mechanism. Instead, the invention allows a standard network cable, using standard network connections and commands to be plugged into the power supply in order to control remote operation. Thus, remote power cycling can be accomplished USING AN EXISTING NETWORK cable and connection and REQUIRING NO ADDITIONAL CONTROL DEVICES, SIGNALS, CABLING or PROGRAMMING COMMANDS to be sent to microcontrollers.

The invention, further, in specific embodiments, due to its design and arrangement of NETWORK PORTS and POWER OUTLETS, allows this network signal to be used in a one rack unit power supply, while providing signal clearance and required by FCC regulations.

The Examiner has cited seven different references to allege obviousness under 35 U.S.C. 103(a). However, as discussed above, the various device cited by the Examiner operate in different

ways from one another and from the present invention. The Examiner has not alleged that there is a suggestion and motivation to combine the cited publications NOR pointing out where the cited art discloses such suggestion or motivation.

Citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. Ex parte Hiyamizu 10 USPQ2d 1393 (PBAI 1988). Such combination of known elements is not obvious absent evidence of a motivating force which would impel persons skilled in the art to do what Applicant has done. Ex parte Levengood 28 USPQ2d 1300 (BPAI 1993). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger 2 USPQ2d 1276 (CAFC 1987); In re Fine 5 USPQ2d 1596 (CAFC 1988). The mere fact that references can be combined does not render the resultant combination obvious unless *the prior art* also suggests the desirability of the combination. In re Fritch 23 USPQ2d 1780 (CAFC 1992).

Even had the Examiner indicated references that show the elements of the claimed invention (which Applicant does not concede) and that could be meaningful combined, the Examiner further has the burden to identify evidence of motivation in the cited art to make Applicant's invention. The Examiner has failed to identify such evidence of motivation in the cited art. The Examiner is respectfully reminded that it is the Examiner's her burden to provide such evidence in the cited art. In re Jones 21 USPQ2d 1941, 1944 (CAFC 1992). In the absence of the Examiner clearly identifying such a suggestion and factual foundation *in the cited art* for (1) the combination of the cited art, and (2) a reasonable expectation of success that the combination would function correctly, Applicants

respectfully submit that the Examiner has failed to make out a prima facie allegation of obviousness under 35 U.S.C. 103.

Applicant has therefore addressed the Examiner's rejections under 35 U.S.C. §103. In view of the foregoing, Applicant believes all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

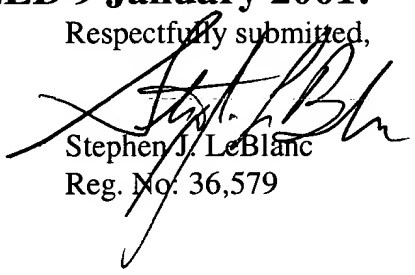
If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (510) 337-7855.

Dated: March 15, 2001

NEW ADDRESS, CHANGE FORM MAILED 9 January 2001:

LAW OFFICES OF JONATHAN ALAN QUINE
P.O. BOX 458, Alameda, CA 94501
Tel: 510 337-7871; Fax: 510 337-7877
PTO Customer Number 22798

Respectfully submitted,



Stephen J. LeBlanc
Reg. No. 36,579

Atty. Docket: 512.000410US (Formerly CYBE.0001US1)

APPENDIX A

"Marked up" claims illustrating the amendments made to the claims of 09/379411 with entry of this amendment, with added text underlined and deleted text struck through. The "|" mark outside the left margin indicates lines with text changes.

1. A controllable power supply comprising:

a mounting having at least one distinguishable surface;

a first network socket located on said distinguishable surface; wherein said first network socket is able to receive a standard network cable connector and able to receive a control signal transmitted on one wire of a network cable also carrying network data communication signals on one or more separate data wires;

~~first and second control signal sockets located on said distinguishable surface for passing through signals received in said first control signal socket out of said second control signal socket;~~

a controlled power output socket ~~located on one of said distinguishable surfaces~~;

control circuitry operatively connected with said ~~control signal socket~~first network socket ~~,~~ and said controlled power ~~supply~~ output socket wherein power to said controlled power output ~~supply~~ socket ~~may~~ can be turned ~~on or~~ off in response to a signal received on a control signal pin connection of ~~at~~ said ~~control signal socket~~first network socket; and

a power input connection ~~socket~~ for ~~receiving a detachable power line for~~ connecting to an external power source.

2. The device according to claim 1, further comprising:

an indicator light operatively connected to said control circuitry for indicating whether power to said ~~power supply socket~~ power output socket is ~~turned~~ on or off.

3. The device according to claim 1, wherein said control circuitry comprises a control relay.

~~4. The device according to claim 1 further comprising a housing comprising six surfaces.~~

5. The device according to claim 4<u>1</u> wherein said ~~housing~~ <u>mounting</u> comprises a top surface, a bottom surface, a front surface, a rear surface, a left surface, and a right surface.

6. The device according to claim 5, wherein said <u>first network</u> ~~control~~ socket is located on said front surface and said ~~power supply socket~~ <u>power output socket</u> is located on said rear surface.

7. The device according to claim 5, wherein said control sockets and said power line socket are located on said rear surface.

8. The device according to claim 5 wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart.

9. The device according to claim <u>1</u> ~~6,~~ wherein said power supply is mountable <u>on</u> ~~in~~ a computer device rack ~~and occupies only one rack unit~~.

~~10. The device according to claim 1 further comprising:~~

~~at least two pairs of control sockets, each pair associated with one or more independently controlled power supply sockets.~~

~~11. The device according to claim 1 further comprising:~~

~~at least four pairs of control sockets, each pair associated with one or more independently controlled power supply sockets.~~

~~12. The device according to claim 1 further comprising:~~

~~at least eight pairs of control sockets, each pair associated with one or more independently controlled power supply sockets.~~

13. A method for providing a power-cycle reboot in a rack-mounted computing device comprising:

deploying a single rack unit~~y~~ power supply wherein sockets and control circuitry may be contained within a housing having a constrained height:

placing a pair of network ~~control signal~~ sockets on a surface of said housing;

placing a controlled power supply outlet on a surface of said housing; and

placing control circuitry within said housing, said control circuitry operatively connected with one signal pin of said pair of network ~~control signal~~ sockets and said ~~power supply socket~~ power output socket wherein power to said ~~power supply socket~~ power output socket may be turned on or off in response to a signal on said one signal pin and wherein communication signals on other pins may be passed through said pair of network ~~control signal~~ sockets.

14. A method according to claim 13 further comprising:

providing an input supply socket for accepting a detachable power line for connection to an external power source.

~~15. A method according to claim 13 further comprising:~~

~~providing an input supply socket for accepting a detachable power line.~~

16. A method according to claim 13 further comprising:

placing said ~~control~~ network sockets on a first surface of said housing;

and placing said power output sockets on a second surface of said housing.

17. A method according to claim 13 further comprising:

placing said network ~~control~~ sockets and said output sockets on a surface of said housing arranged to align with a computing device for which a power cycle reboot is being provided.

~~18. A method according to claim 13 further comprising:~~

~~providing an indicator for each pair of control signal sockets or for each controlled output indicating whether power is supplied to an output.~~

~~19. A controllable power supply comprising:~~

~~a housing of six surfaces occupying one rack unit;~~

~~at least one pair of RJ-45 network connector jacks for routing a network connection through said power supply and reading a control signal therefrom;~~

~~a relay responsive to said control signal operationally connected between an external power source connection and a controlled power output such that when a correct signal is routed through said pair of RJ-45 jacks, power is selectively supplied to said output.~~

~~20. The device according to claim 19 wherein a control signal is input on 7 of one of said RJ-45 jacks.~~

21. The device according to claim 1 wherein said controlled power output socket is located on a different distinguishable surface of said mounting.

22. A apparatus for providing a plurality of independently controllable power supplies comprising:

two or more independently controlled sets of power outlets;

for each independently controlled set of power outlets, a controllable relay operationally connected between said power outlet set and a power source;

for each independently controlled set of power outlets and each controllable relay; a first network connection socket having a plurality of pin connections, with one of said pin connections used as a control connection for controlling operation of said relay, said control connection not used to carry data;

such that power supplied on one set of said independently controlled sets of power outlets can be turned on or off by applying a control signal to said control connection.

23. The device according to claim 22 wherein said apparatus is mounted so that it may be easily installed on a network device rack.

24. The device according to claim 22 wherein each of said controlled sets comprise one power outlet.

25. The device according to claim 22 wherein each of said controlled sets comprise a plurality of power outlets.

26. The device according to claim 22 further comprising:

for each independently controlled set of power outlets, an indicator light operatively connected to said set's corresponding controllable relay and corresponding control connection to indicate the sate of said independently controlled set of power outlets.

27. The device according to claim **22** wherein each of said relays is in a normally closed position such that power is supplied to each of said independently controlled sets of power outlets unless a control signal is applied to a set's corresponding control connection.

28. The device according to claim **22** wherein each of said relays is in a normally open position such that power is only supplied to each of said independently controlled sets of power outlets when a control signal is applied to a set's corresponding control connection.

29. The device according to claim **22** further comprising, for each of said first network connection sockets, a second network socket allowing network communication signals to pass between said first and said second network sockets.

30. The device according to claim **22** wherein each of said network connection sockets has at least eight pin connections.

31. The device according to claim **30** wherein each of said relays is controlled by two relay controls and wherein one of said relay controls is operationally connected to a control connection of its corresponding network socket and the other of said relay controls is operationally connected to a ground signal connection of its corresponding network socket.

32. The device according to claim **31** wherein said control connection is made to a line carrying a data terminal ready (DTR) signal provided on a standard network connector.

33. The device according to claim **22** further comprising:

at least three independently controlled sets of power outlets and at least three corresponding controllable relays, and at least three corresponding first network connection sockets.

34. The device according to claim **22** further comprising:

at least four independently controlled sets of power outlets and at least four corresponding controllable relays, and at least four corresponding first network connection sockets.

35. The device according to claim **22** further comprising:

at least eight independently controlled sets of power outlets and at least eight corresponding controllable relays, and at least eight corresponding first network connection sockets.

36. The device according to claim **34** further wherein the apparatus is housed in a housing having a top and bottom surface and wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart and can be mounted in a computer device rack and only occupy one rack unit.

37. The device according to claim **35** further wherein the apparatus is housed in a housing having a top and bottom surface and wherein said top surface and said bottom surface

are parallel planes between 1.5 and 2.0 inches apart and can be mounted in a computer device rack and only occupy one rack unit.

APPENDIX B

All claims pending in 09/379411with entry of this amendment

(Provided as a courtesy to the Examiner for ease of reference)

1. A controllable power supply comprising:

a mounting having at least one distinguishable surface;

a first network socket located on said distinguishable surface; wherein said first network socket is able to receive a standard network cable connector and able to receive a control signal transmitted on one wire of a network cable also carrying network data communication signals on one or more separate data wires;

a controlled power output socket;

control circuitry operatively connected with said first network socket and said controlled power output socket wherein power to said controlled power output socket can be turned off in response to a signal received on a control signal pin connection of said first network socket; and

a power input connection for connecting to an external power source.

2. The device according to claim 1, further comprising:

an indicator light operatively connected to said control circuitry for indicating whether power to said power output socket is on or off.

3. The device according to claim 1, wherein said control circuitry comprises a control relay.

5. The device according to claim 1 wherein said mounting comprises a top surface, a bottom surface, a front surface, a rear surface, a left surface, and a right surface.

6. The device according to claim 5, wherein said first network socket is located on said front surface and said power output socket is located on said rear surface.

7. The device according to claim 5, wherein said control sockets and said power line socket are located on said rear surface.

8. The device according to claim 5 wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart.

9. The device according to claim 1 wherein said power supply is mountable on a computer device rack.

13. A method for providing a power-cycle reboot in a rack-mounted computing device comprising:

deploying a single rack unit power supply wherein sockets and control circuitry may be contained within a housing having a constrained height:

placing a pair of network sockets on a surface of said housing;

placing a controlled power supply outlet on a surface of said housing; and

placing control circuitry within said housing, said control circuitry operatively connected with one signal pin of said pair of network sockets and said power output socket wherein power to said power output socket may be turned on or off in response to a signal on said one signal pin and wherein communication signals on other pins may be passed through said pair of network sockets.

14. A method according to claim 13 further comprising:

providing an input supply socket for accepting a detachable power line for connection to an external power source.

16. A method according to claim 13 further comprising:

placing said network sockets on a first surface of said housing;

and placing said power output sockets on a second surface of said housing.

17. A method according to claim 13 further comprising:

placing said network sockets and said output sockets on a surface of said housing arranged to align with a computing device for which a power cycle reboot is being provided.

21. The device according to claim 1 wherein said controlled power output socket is located on a different distinguishable surface of said mounting.

22. A apparatus for providing a plurality of independently controllable power supplies comprising:

two or more independently controlled sets of power outlets;

for each independently controlled set of power outlets, a controllable relay operationally connected between said power outlet set and a power source;

for each independently controlled set of power outlets and each controllable relay; a first network connection socket having a plurality of pin connections, with one of said pin connections used as a control connection for controlling operation of said relay, said control connection not used to carry data;

such that power supplied on one set of said independently controlled sets of power outlets can be turned on or off by applying a control signal to said control connection.

23. The device according to claim **22** wherein said apparatus is mounted so that it may be easily installed on a network device rack.

24. The device according to claim **22** wherein each of said controlled sets comprise one power outlet.

25. The device according to claim **22** wherein each of said controlled sets comprise a plurality of power outlets.

26. The device according to claim **22** further comprising:

for each independently controlled set of power outlets, an indicator light operatively connected to said set's corresponding controllable relay and corresponding control connection to indicate the sate of said independently controlled set of power outlets.

27. The device according to claim **22** wherein each of said relays is in a normally closed position such that power is supplied to each of said independently controlled sets of power outlets unless a control signal is applied to a set's corresponding control connection.

28. The device according to claim **22** wherein each of said relays is in a normally open position such that power is only supplied to each of said independently controlled sets of power outlets when a control signal is applied to a set's corresponding control connection.

29. The device according to claim **22** further comprising, for each of said first network connection sockets, a second network socket allowing network communication signals to pass between said first and said second network sockets.

30. The device according to claim **22** wherein each of said network connection sockets has at least eight pin connections.

31. The device according to claim **30** wherein each of said relays is controlled by two relay controls and wherein one of said relay controls is operationally connected to a control connection of its corresponding network socket and the other of said relay controls is operationally connected to a ground signal connection of its corresponding network socket.

32. The device according to claim **31** wherein said control connection is made to a line carrying a data terminal ready (DTR) signal provided on a standard network connector.

33. The device according to claim **22** further comprising:

at least three independently controlled sets of power outlets and at least three corresponding controllable relays, and at least three corresponding first network connection sockets.

34. The device according to claim **22** further comprising:

at least four independently controlled sets of power outlets and at least four corresponding controllable relays, and at least four corresponding first network connection sockets.

35. The device according to claim **22** further comprising:

at least eight independently controlled sets of power outlets and at least eight corresponding controllable relays, and at least eight corresponding first network connection sockets.

36. The device according to claim **34** further wherein the apparatus is housed in a housing having a top and bottom surface and wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart and can be mounted in a computer device rack and only occupy one rack unit.

37. The device according to claim **35** further wherein the apparatus is housed in a housing having a top and bottom surface and wherein said top surface and said bottom surface are parallel planes between 1.5 and 2.0 inches apart and can be mounted in a computer device rack and only occupy one rack unit.

APPENDIX C

"Marked Up" Paragraphs Illustrating The Amendments Made To The Specification Of 09/379411 With Entry Of This Amendment

Please amend the first five paragraphs of the application as indicated below:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation in part of METHOD AND APPARATUS FOR A REMOTELY SWITCHABLE POWER SUPPLY, 09/309,321 filed 5/11/99.

This application is related to the following design applications, each by the same inventor, each of which is incorporated by reference, and each of which was filed on the same day as this application:

REMOTELY SWITCHABLE POWER SUPPLY FOR NETWORK DEVICE RACKS HAVING PORTS AND OUTLETS ON ONE SURFACE filed 21 Dec 1999, A/N 29/115,992;

REMOTELY SWITCHABLE POWER SUPPLY FOR NETWORK DEVICE RACKS HAVING ~~16 NETWORK PORTS AND FOUR POWER OUTLETS~~EIGHT POWER OUTLET SOCKETS AND SIXTEEN NETWORK PORT SOCKETS, filed 21 Dec 1999, A/N 29/115,990 ; and

REMOTELY SWITCHABLE POWER SUPPLY FOR NETWORK DEVICE RACKS HAVING NETWORK PORTS AND POWER OUTLETS ON DIFFERENT SURFACES filed 21 Dec 1999, A/N 29/115,991.